

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74SERIAL NO.  
~~Unknown~~INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT  
Achilefu et al.FILING DATE  
October 17, 2001GROUP 1610  
~~Unknown~~10/17/01  
09/981206  
10/17/01

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DE	A.A	5	4	5	3	5	0	5	09/1995	Lee et al.	544	124	
	A.B												
	A.C												
	A.D												
	A.E												
	A.F												
	A.G												
	A.H												
	A.I												
	A.J												
	A.K												

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
DE	A.L	WO 96/17628	06/1996	Germany	—	—	No
DE	A.M	WO 98/22146	05/1998	Germany	—	—	No
DE	A.N	WO 98/48838	11/1998	England	—	—	
DE	A.O	WO 98/48846	11/1998	England	—	—	
	A.P						
	A.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

DE	A.R	Woolam et al., <u>Cancer Statistics, 2000: A Benchmark for the New Century</u> , 2000, CA-A Cancer Journal For Clinicians, 50 (1), pp. 6-33
DE	A.S	Caesar et al., <u>The Use of Indocyanine Green in the Measurement of Hepatic Blood Flow and as a Test of Hepatic Function</u> , 1961, Clinical Science, 21, pp. 43-57
DE	A.T	Mujumdar et al., <u>Cyanine Dye Labeling Reagents: Sulfoindocyanine Succinimidyl Esters</u> , 1993, Bioconjugate Chemistry, 4 (2), pp. 105-111

EXAMINER

DE Jones

DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74

SERIAL NO.

~~Unknown~~ 02/98/206INFORMATION DISCLOSURE  
STATEMENT BY APPLICANTAPPLICANT  
Achilefu et al.

(37 CFR 1.98(b))

(Use several sheets if necessary)

FILING DATE  
October 17, 2001

GROUP

~~Unknown~~ 1614

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	B.A						
	B.B						
	B.C						
	B.D						
	B.E						
	B.F						
	B.G						
	B.H						
	B.I						
	B.J						
	B.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	B.L						
	B.M						
	B.N						
	B.O						
	B.P						
	B.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	B.R	Belnier et al., <u>Murine pharmacokinetics and antitumor efficacy of the photodynamic sensitizer 2-[1-hexyloxyethyl]-2-devinyl pyropheophorbide-a</u> , 1993, Journal of Photochemistry and Photobiology B: Biology, 20, pp. 55-61
	B.S	Wagnieres et al., <u>In Vivo Fluorescence Spectroscopy and Imaging for Oncological Applications</u> , 1998, Photochemistry and Photobiology, 68 (5), pp. 603-632
	B.T	Reynolds et al., <u>Imaging of Spontaneous Canine Mammary Tumors Using Fluorescent Contrast Agents</u> , 1999, Photochemistry and Photobiology, 70 (1), pp. 87-94

EXAMINER

DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74

SERIAL NO.

~~Unknown~~ 09/98/200INFORMATION DISCLOSURE  
STATEMENT BY APPLICANTAPPLICANT  
Achilefu et al.

(37 CFR 1.98(b))

(Use several sheets if necessary)

FILING DATE  
October 17, 2001

GROUP

~~Unknown~~ 1616

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	C.A						
	C.B						
	C.C						
	C.D						
	C.E						
	C.F						
	C.G						
	C.H						
	C.I						
	C.J						
	C.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	C.L						
	C.M						
	C.N						
	C.O						
	C.P						
	C.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

29	C.R	Ballou et al., <u>Tumor labeling in vivo using cyanine-conjugated monoclonal antibodies</u> , 1995, Cancer Immunology, Immunotherapy, 41, pp. 257-263
29	C.S	Weissleder et al., <u>In vivo imaging of tumors with protease-activated near-infrared fluorescent probes</u> , April 1999, Nature Biotechnology, 17, pp. 375-378
29	C.T	Licha et al., <u>New Contrast Agents for Optical Imaging: Acid-Cleavable Conjugates of Cyanine Dyes with Biomolecules</u> , January 1999, Part of the SPIE Conference on Molecular Imaging: Reporters, Dyes, Markers, and Instrumentation, San Jose, California, 3600, pp. 29-35

EXAMINER

DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74

SERIAL NO.

~~Unknown~~ 09/98/200INFORMATION DISCLOSURE  
STATEMENT BY APPLICANTAPPLICANT  
Achilefu et al.

(37 CFR 1.98(b))

(Use several sheets if necessary)

FILING DATE  
October 17, 2001GROUP  
~~Unknown~~ 1614

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	D.A						
	D.B						
	D.C						
	D.D						
	D.E						
	D.F						
	D.G						
	D.H						
	D.I						
	D.J						
	D.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	D.L						
	D.M						
	D.N						
	D.O						
	D.P						
	D.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	D.R.	Dougherty et al., <u>Photoradiation Therapy. II. Cure of Animal Tumors With Hematoporphyrin and Light</u> , July 1975, Journal of the National Cancer Institute, 55 (1), pp. 115-121
	D.S.	Achilefu et al., <u>Novel Receptor-Targeted Fluorescent Contrast Agents for In Vivo Tumor Imaging</u> , 2000, Investigative Radiology, 35 (8), pp. 479-485
	D.T.	Benaron and Stevenson, <u>Optical Time-of-Flight and Absorbance Imaging of Biologic Media</u> , March 1993, Science, New Series, 259 (5100), pp. 1463-1466

EXAMINER

DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74

SERIAL NO.

~~Unknown~~ 08/981,206INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT  
Achilefu et al.FILING DATE  
October 17, 2001

GROUP

~~Unknown~~ 1616

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	E.A						
	E.B						
	E.C						
	E.D						
	E.E						
	E.F						
	E.G						
	E.H						
	E.I						
	E.J						
	E.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	E.L						
	E.M						
	E.N						
	E.O						
	E.P						
	E.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	E.R,	de Jong et al., <u>Comparison of <sup>111</sup>In-labeled Somatostatin Analogues for Tumor Scintigraphy and Radionuclide Therapy</u> , February 1998, Cancer Research, 58, pp. 437-441
	E.S	Folli et al., <u>Immunophotodiagnosis of colon carcinomas in patients injected with fluoresceinated chimeric antibodies against carcinoembryonic antigen</u> , September 1992, Proceedings of the National Academy of Sciences USA, 89, pp. 7973-7977
	E.T	Ballou et al., <u>Tumor Detection and Visualization Using Cyanine Fluorochrome-Labeled Antibodies</u> , 1997, Biotechnology Progress, 13, pp. 649-658

EXAMINER

DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74

SERIAL NO.

~~Unknown~~ 09/98/2004INFORMATION DISCLOSURE  
STATEMENT BY APPLICANTAPPLICANT  
Achilefu et al.

(37 CFR 1.98(b))

(Use several sheets if necessary)

FILING DATE  
October 17, 2001

GROUP

~~Unknown~~ 1616

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	F.A						
	F.B						
	F.C						
	F.D						
	F.E						
	F.F						
	F.G						
	F.H						
	F.I						
	F.J						
	F.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	F.L						
	F.M						
	F.N						
	F.O						
	F.P						
	F.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	F.R	Tajiri et al., <u>Fluorescent diagnosis of experimental gastric cancer using a tumor-localizing photosensitizer</u> , 1997, Cancer Letters, 111, pp. 215-220
	F.S	Sackmann, <u>Fluorescence Diagnosis in GI Endoscopy</u> , 2000, Endoscopy, 32 (12), pp. 977-985
	F.T	Mizushige et al., <u>Enhancement of Ultrasound-Accelerated Thrombolysis by Echo Contrast Agents: Dependence on Microbubble Structure</u> , 1999, Ultrasound in Medicine and Biology, 25 (9), pp. 1431-1437

EXAMINER

DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74

SERIAL NO.

~~Unknown~~ 09/1981, 2004INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT  
Achilefu et al.FILING DATE  
October 17, 2001GROUP  
~~Unknown~~ 1616


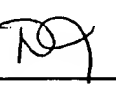

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	G.A						
	G.B						
	G.C						
	G.D						
	G.E						
	G.F						
	G.G						
	G.H						
	G.I						
	G.J						
	G.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	G.L						
	G.M						
	G.N						
	G.O						
	G.P						
	G.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	G.R	Frinking et al., <u>Ultrasound Contrast Imaging: Current and New Potential Methods</u> , 2000, Ultrasound in Medicine and Biology, 26 (6), pp. 965-975
	G.S	Rezzoug et al., <u>In vivo photodynamic therapy with meso-tetra(m-hydroxyphenyl)chlorin (mTHPC): influence of light intensity and optimization of photodynamic efficiency</u> , September 1996, The Society of Photo-Optical Instrumentation Engineers, 2924, pp. 181-186
	G.T	Stranadko et al., <u>Photodynamic therapy of recurrent cancer of oral cavity, an alternative to conventional treatment</u> , September 1996, The Society of Photo-Optical Instrumentation Engineers, 2924, pp. 292-297

EXAMINER



DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74SERIAL NO.  
~~Unknown~~ 09/98/206INFORMATION DISCLOSURE  
STATEMENT BY APPLICANTAPPLICANT  
Achilefu et al.

(37 CFR 1.98(b))

(Use several sheets if necessary)

FILING DATE  
October 17, 2001GROUP  
~~Unknown~~ 1616

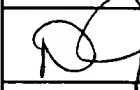
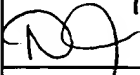

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	H.A						
	H.B						
	H.C						
	H.D						
	H.E						
	H.F						
	H.G						
	H.H						
	H.I						
	H.J						
	H.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	H.L						
	H.M						
	H.N						
	H.O						
	H.P						
	H.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	H.R	Müller et al., <u>Medical Optical Tomography: Functional Imaging and Monitoring</u> , 1993, The Society of Photo-Optical Instrumentation Engineers, Volume IS11 (Table of Contents)
	H.S	Tearney et al., <u>In Vivo Endoscopic Optical Biopsy with Optical Coherence Tomography</u> , June 1997, Science, 276, 2037-2039
	H.T	Tromberg et al., <u>Non-invasive measurements of breast tissue optical properties using frequency-domain photon migration</u> , 1997, Philosophical Transactions: Biological Sciences, 352 (1354), pp. 661-668

EXAMINER



DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.



SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74

SERIAL NO.

~~Unknown~~ 09/98/2006INFORMATION DISCLOSURE  
STATEMENT BY APPLICANTAPPLICANT  
Achilefu et al.

(37 CFR 1.98(b))

(Use several sheets if necessary)

FILING DATE  
October 17, 2001GROUP  
~~Unknown~~ 1614

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	I.A						
	I.B						
	I.C						
	I.D						
	I.E						
	I.F						
	I.G						
	I.H						
	I.I						
	I.J						
	I.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	I.L						
	I.M						
	I.N						
	I.O						
	I.P						
	I.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

	I.R	/	Fantini et al., <u>Assessment of the size, position, and optical properties of breast tumors in vivo by noninvasive optical methods</u> , April 1998, Applied Optics, 37 (10), 1982-1989
	I.S	/	Pelegrin et al., <u>Photoimmunodiagnosis with antibody-fluorescein conjugates: in vitro and in vivo preclinical studies</u> , 1992, J Cell Pharmacology, 3, p. 141-145
	I.T	/	Wilson, <u>Optical Properties of Tissues</u> , 1991, Encyclopedia of Human Biology, 5, pp. 587-597

EXAMINER

DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.

SUBSTITUTE FORM PTO-1449  
(MODIFIED)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
MRD/74

SERIAL NO.

~~Unknown~~ 09/98/206INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT  
Achilefu et al.FILING DATE  
October 17, 2001GROUP  
~~Unknown~~ 1616

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	J.A						
	J.B						
	J.C						
	J.D						
	J.E						
	J.F						
	J.G						
	J.H						
	J.I						
	J.J						
	J.K						

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	J.L						
	J.M						
	J.N						
	J.O						
	J.P						
	J.Q						

## OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

J.R	He et al., Measurement of blood volume using indocyanine green measured with pulse-spectrophotometry: Its reproducibility and reliability, 1998, Critical Care Medicine, 26 (8), pp. 1446-1451
J.S	
J.T	

EXAMINER



DATE CONSIDERED

6/30/03

EXAMINER: Initial if citation considered, whether or not in conformance. Draw line through citation only if not in conformance and not considered. Include a copy of this form with next communication to applicant.